

KING & LINK PIN DISC BRAKE ADAPTER KIT 55-62

This kit will not work unless you have a tandem master cylinder. 1967 buses came stock with the tandem master cylinder. If you don't have this master cylinder, we can sell you a master cylinder adapter and reservoir that will work with this system. A single master cylinder does not push enough fluid to work the calipers.

KIT INCLUDES:

- 2 Bearing hubs
- 2 Caliper brackets
- 2 Outer bearings
- 2 Bearing seals
- 2 Bearing lock tabs
- 8 10mm Allen bolts
- 8 10mm lock washers

TOOLS NEEDED:

- Large channel locks
- 7, 10, 11, 14, 17mm wrench
- 8mm socket (5/16" Allen socket)
- 15mm socket
- Large crescent wrench
- Hammer
- Punch
- Large standard screwdriver
- Diagonal cutters
- Torque wrench
- Jack stands
- Floor jack
- 3' of 5mm or 1/4" fuel line
- 2 Clear bottles

GREASE AND FLUID NEEDED:

- High temp disc brake grease
- Brake fluid

PARTS NEEDED:

- 2 73-79 bus rotors
- 2 73-79 bus calipers and pads
- 4 73-79 bus caliper mounting bolts
- 2 Wheel adapters to match your wheels
- 10 71-79 bus wheel nuts to mount adapters
- 2 55-67 front brake hoses if yours are bad
- 1 Tandem master cylinder

DISASSEMBLY OF THE STOCK BRAKES:

- 1) Break the lug nuts loose on both front wheels. Jack the front end up by placing your floor jack under the center pin of the front end. Place jack stands under the front end of the bus and remove the wheels. Leave the floor jack under the center pin for added safety.
- 2) With the large channel locks, grab the bearing cap and wiggle it off; if you're on the driver's side you'll need to remove the clip or wire that holds the speedometer cable in the cap first.
- 3) Use your hammer and large screwdriver and bend the lock tab back so as you can remove the outer bearing nut. The driver's side nuts are reverse thread. Next remove the lock tab and inner nut. Place nuts in the bearing cap and away from any dirt. Wiggle the drum side to side and the thrust washer and outer bearing should come out. Place these in the bearing cap as well. Now pull the drum off. If it doesn't come off, try backing off the brake shoes using the large screwdriver through the adjusting hole in the drum.
- 4) Now before you remove the backing plate, you're going to want to remove the brake flex line. With your 17mm and 11mm wrenches, disconnect the flex line from the metal line at the body. Now with your diagonal cutters grab the clip that holds the flex line in the tab and remove the clip. Next remove the large grease sert on the spindles that holds a brake line support. Once you get the support bracket off screw the sert back in and tighten. Remove the support bracket from the line with a screwdriver and 10mm wrench. Now with a 14mm wrench remove the flex line at the wheel cylinder. Make sure you don't set the line in the dirt, as we will be reusing it.
- 5) With your 15mm socket remove the four bolts that hold the wheel cylinders to the backing plate and spindle. Remove the backing plate.
- 6) Now is a good time to clean the caked-on grease off the spindles and grease all four serts on them. Repeat the same steps on the other side of the bus.

INSTALLING THE ADAPTER KIT:

- 1) Grab the horseshoe bracket that mounts the caliper. It will bolt to the four holes that the wheel cylinders bolted to. The bracket should be facing the rear of the spindle and the ears of the bracket should face towards the middle of the bus. Use the 10mm Allen bolts and lock washers that come with the kit and bolt it on. With the 8mm socket, torque the bolts to 40 ft lbs.
- 2) Now go and find your old drum and with your hammer and punch drive out the old inner bearing races. Install these races and the new outer bearing races into the rotor hub that comes in the kit. With your tub of grease smear some grease into the hub and then pack the inner wheel bearing and place it into the hub. Next drive in the new seal. With the hub in hand, smear a light film of grease on the spindle itself and slide the hub on. Pack the outer bearing and install it on the spindle. Then install the thrust washer and one of the bearing nuts. The driver's side nuts are reverse thread.
- 3) With your large crescent wrench tighten the bearing nut; turn the hub so as your handle of the wrench lines up with one of the studs. Back off the nut so the handle lines up with the next stud. In other words back up the nut a fifth of

one turn. Place the new bearing lock tab against the inner nut then put on the outer nut. Tighten the outer nut up making sure you don't move the inner nut. Bend the lock tab with your large channel lock pliers, one tab in and the other out.

- 4) Place the rotor on the hub and then the wheel adapter. Hand tighten the nuts that hold the adapter to the studs. Now with your hammer install the bearing cap and if you're on the driver's side the speedometer cable through the cap and secure with a clip.
- 5) Grab your caliper and look at the mounting holes. One hole is larger than the other, this hole needs to be the top hole. This will determine which caliper is the driver's side and which is the passenger's side. Look at the bolts. You'll see that one has a shoulder; this is the top bolt. Place the caliper over the rotor and line up the holes on the bracket. If the caliper won't go on the rotor, squeeze the pads back with the large channel lock pliers. Get both bolts in and torque to 72 ft lbs.
- 6) Find your flex line and screw it into the caliper using your 14mm wrench. With the other end, place it back through the tab at the body and hand thread the metal line into it. With it hand tight, put the clip back on that holds the flex line to the tab. Now with your 11mm and 17mm wrenches tighten the flex line to the metal line. Repeat the same steps on the other side.

BLEEDING YOUR BRAKES:

The idea of bleeding the brakes is to remove the air that has collected in the brake system.

- 1) The first thing you have to do is adjust your rear brake shoes. So start by backing off the emergency brake cables and adjusting the shoes. Next you need to check the rod that goes into the master cylinder from the pedal. It should have a 1/8" of play before you can feel the rod make contact with the plunger. Note: If there is no play, the plunger will not come back far enough to let the fluid into the cylinder. If it is too loose, you won't have good pedal height.
- 2) Fill the brake fluid reservoir and call a friend. Take one of your clear bottles and half of the hose you have and go to the passenger side rear wheel. Open the bleeder valve with your 7mm wrench at that wheel and attach the hose to the bleeder and place the other end in the bottle. Leave it open for now. Go to the passenger side front caliper. Pour about a 1" of brake fluid in your other clear bottle. Place the hose on the bleeder and the other end in the bottle making sure it stays in fluid. Now with the hose on, crack open the bleeder. Have your friend slowly pump the brakes. Watch the bubbles in the bottle. When the bubbles stop, have your friend hold the pedal to the floor and close the bleeder. Remove the hose and repeat the same thing on the driver's side front. It's a good idea to keep an eye on the brake fluid reservoir, if it gets low add brake fluid. Once the fronts are bled you can go to the rear passenger side. This should already have a bottle on it. Have your friend pump the brake and check for bubbles. Once it's done go to the driver's side rear and repeat the same steps. Note: You have to leave the rear bleeder open when bleeding the fronts or you will never get all the air out of the front brakes. One last note, if a bleeder breaks off in the rear; just replace the rear wheel cylinder. A

broken bleeder is next to impossible to get out and repair and besides rear wheel cylinders are cheap.

LAST STEPS:

- 1) Once the brakes are bled put your wheels back on and hand tighten. Put the bus back on the ground and have someone step on the brakes. With your torque wrench tighten the adapter bolts and the wheel bolts to 80 ft lbs. When you torque the bolts have your friend step on the brakes. If the bus moves, you did something wrong or you still have air in the lines or a leak in the lines. Find it and fix it now or may you rest in peace.
- 2) Drive the bus out a couple of feet and test the brakes. If it feels good, go a little faster and farther and test again. If everything is working, have a friend step on the brakes real hard while it's parked and check for any leaks.
- 3) If your bus pulls to one side, it's more than likely the flex line. It will be the line on the same side it's pulling to. Replace the flex line. Bleed the brakes again following the same steps as before, and you should be good to go.



WOLFGANG INTERNATIONAL

***Manufacturers of Custom &
Reproduction VW Products***

**1117 Parkview Ave.
Redding, CA 96001**

(530) 246-GANG (4264)

Fax 244-7261

E-mail wolf@c-zone.net

www.wolfgangint.com